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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,716	12/22/2000	Gary W. Grube	276440-11	1179
27521	7590	06/22/2004	EXAMINER	
KEN BURRASTON KIRTON & MCCONKIE PO BOX 45120 SALT LAKE CITY, UT 84145-0120			ABRAMS, NEIL	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/746,716	Applicant(s) GRUBE ET AL. 	
	Examiner Neil Abrams	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 9, 16 and 52-601 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15, 17-51, 61-63, 65-67 and 69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ <u>3 sheets</u> | 6) <input type="checkbox"/> Other: _____ |

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Parent case paragraph, pat nos. and "now abandoned" must be added.

Non-elected claims could be cancelled ~~where~~^{if} appropriate.

Claim 10, line 1, spelling error.

Claims 11, 17-21, 43, 44 are objected to since listed as elected but appearing to be drawn to non-elected species.

For claim 11, terms "beam contoured" are only used in spec for figs. 5A-5D, non-elected embodiment. Claim 17-21 are dependent on withdrawn claim 16.

Claims 43, 44 appear directed to non-elected species of figs. 5A-5D; compare be claim 64. Some of these claims are treated below since status is uncertain at this time.

Claims 6, 15, 34, 42 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 42 are unclear in that 70-110 degrees includes 90 degrees ~~which~~^{which} would be a non-inclined state; claim 34 is unclear, the beams should be tied in with other structure of claim 1, also it seems to call for plural beams for one contact; this appears incorrect. Claim 15 is unclear and clarification as to readability on an embodiment is required. Claim 62 is unclear, should it call for plural columns for one beam.

Claims 1-69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For independent claims 1, 35, etc. column "top" is recited. The "contact element" or "beam" should be recited as joined to the "top of the column" to set forth an operable device as believed to be intended.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8, 10-15, 17-51, 61-63, 65-67 and 69 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 09/834074 (Grube). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of this case define broadened variations of claims of the application that differ mainly by omission of features.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-8, 10-15, 17-51, 61-63, 65-67 and 69 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,520,778, the parent case. Although the conflicting

claims are not identical, they are not patentably distinct from each other because the claims of this case which call for "post beam" and those which add "tip" define broaden variations of the claims of the patent.

Claims 1-8, 10, 11, 13-15, 30, 31, 32, 34, 35-40, 61-63, 66, 67, 69 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Beaman.

The Beaman figs. 1, 2, system includes column elements 21 with a top surface at which a contact element (beam) 24 are fixed, the beams being resilient.

For claim 3 top of column is a contact pad. For claim 6, ninety degree Beaman columns meets claim language. For claim 8, change to cylindrical bumps would be obvious design matter. Claim 10, 13 obvious to use standard sacrificial substrate (carrier) to transport beams 24 to the columns. Claim 11, term "contour" met by beam 24 and tip 27.

Claims 14, 15, note tips 27, 28 on each beam. Claim 15, as best understood, met by tips 27, 28 as located. Claims 36-38 do not define unobviously over card 11 of Beaman. Claim 67, note standoff tip 28 and standoff 27.

For all claims should issues arise, recited features considered obvious variations.

Also obvious to use plural columns for single beam, such change producing no unexpected advantage.

Claims 1-8, 10, 11, 13-15, 30, 31, 32, 34-40, 61-63, 66, 67, 69 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over White alone or taken in view of Fjelstad and Beaman.

The White system includes columns 16 and beams 14, (Fig. 1) the beam being resilient.

Claims 2-8 also met by White. For all claims White applied similarly to Beaman, see above discussion. Claim 14, note sacrificial substrate. Claim 14, 15, 67, etc. White beams lack tips. Obvious to use tips/standoffs in view of Fjelstad at 32, 34, and 316, 318 and 414 (tip) and Beaman, tip 28, standoff 27. This would enable forces to be concentrated. For all claims, should issues arise, recited features considered obvious variations. Use of two columns per beam and of inclined columns not shown to produce stated advantage and are considered obvious ~~various~~ ^{variations}. Also, for claim 6, the White 90 degree columns meet claim language.

Claims 1, 3-8, 10-15, 30-40, 68, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge 6441315 in view of Beaman.

See prior art figs. 1A, with post 12, beam 10 with tip 14. Prior art only shows one contact; obvious to include plural contacts in view of Beaman. This is necessary for proper testing.

Claim 6 inclined shape similar to shape of column 12 and deemed obvious variation. Part 12 not clearly disclosed, appears obvious to form it as a flat or cylindrical wire. Claims 20, etc do not define over integral beam and tip 10, 14. Should issues arise, other features deemed obvious variation. Part 12 not clearly disclosed; appears obvious to form it as a flat or cylindrical wire. Claims 20, etc do not define over integral beam and tip 10, 14. Should issues arise, other features deemed obvious variations.

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Also obvious, should the feature be at issue to use add on tips in view of Beaman.

The following is an examiner's statement of reasons for allowance: Claim 2 "resilient beam" defines over the Eldridge 6,441,315 fig. 1 beam 10 which is not disclosed as resilient. ^PApplicant asked to discuss this prior art, fig. 1 device. As to materials used, other shapes used, insofar as they relate the claims of this case. Note common inventorship of that patent and this case.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Neil Abrams at telephone number (571)272-2089.

Abrams/ds

06/17/04


NEIL ABRAMS
EXAMINER
ART UNIT 322